

U.S. Application No. 09/632,200
Reply to Office Action dated December 15, 2005

PATENT
450100-02634

IN THE CLAIMS

An identifier indicating the status of each claim is provided.

Listing of Claims:

1. (Previously Presented) A disk drive apparatus containing a plurality of operation modes, comprising:
 - a first mode having a first data rate and error processing for a first data reliability independent of a time duration for error processing;
 - a second mode having a second data rate and error processing for the first data reliability independent of the time duration for error processing;
 - a third mode having the first data rate and error processing for a second data reliability dependent on the time duration for error processing; and
 - a fourth mode having the second data rate and error handling for the second data reliability dependent on the time duration for error processing,wherein the first data rate is higher than the second data rate,
wherein the first data rate uses a higher power and a higher disk rotation speed than the second data rate; and
wherein the first data reliability is higher than the second data reliability.
2. (Canceled)
3. (Previously Presented) A disk drive apparatus according to claim 1,
wherein the error handling method in said third and fourth operation mode is an error handling

U.S. Application No. 09/632,200
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PATENT
450100-02634

method in which an upper limit of an error handling time for recording or playback of real-time continuous information is determined.

4. (Previously Presented) A disk drive apparatus according to claim 3, wherein in said third and fourth operation mode, when error handling is not completed within the upper limit of said error handling time, the error handling is stopped, and a recording or playback process for data which follows is performed.

5. (Previously Presented) A disk drive apparatus according to claim 3, wherein the upper limit of said error handling time can be set by an attached host device.

6. (Canceled)

7. (Canceled)

8. (Previously Presented) A disk drive apparatus according to claim 1, wherein said disk drive apparatus can be battery driven, and when said disk drive apparatus is battery driven, the disk drive apparatus operates in a second or fourth operation mode in which the disk rotation speed is set to be low.

9. (Original) A disk drive apparatus according to claim 1, wherein said disk drive apparatus can be connected to a host system via a host interface, performs a recording or playback operation onto or from a disk in accordance with a recording or playback command

U.S. Application No. 09/632,200
Reply to Office Action dated December 15, 2005

PATENT
450100-02634

received via said host interface, and switches among different operation modes in accordance with a command containing operation mode specification, which is received via the host interface.

10. (Original) A disk drive apparatus according to claim 9, wherein the command containing said operation mode specification is a command added in accordance with the ATA (AT-Attachment) standard prepared by the ANSI (American National Standards Institute).

11. (Original) A disk drive apparatus according to claim 9, wherein the command containing said operation mode specification is a command added in accordance with the PC card ATA (AT-Attachment) standard defined by the PCMCIA (Personal Memory Card International Association)/JEIDA (Japan Electronics Industry Development Association).

12. (Original) A disk drive apparatus according to claim 1, wherein said disk drive apparatus is a removable disk apparatus from which a mounted disk can be removed.

13. (Original) A disk drive apparatus according to claim 1, wherein the outer dimensions and the connector construction of said disk drive apparatus are in compliance with the PC card standard defined by the PCMCIA/JEIDA.

14. (Original) A disk drive apparatus according to claim 1, wherein said disk drive apparatus performs positioning control of a head with respect to a disk on the basis of servo

U.S. Application No. 09/632,200
Reply to Office Action dated December 15, 2005

PATENT
450100-02634

information in accordance with a sector servo method of sectors provided radially by partitioning the data recording surface of the disk.

15. (Original) A disk drive apparatus according to claim 14, wherein said disk drive apparatus has a synchronous head position detection construction for generating a servo clock on the basis of said servo information recording area and for detecting head position information while referring to the generated clock.

16. (Previously Presented) A disk drive apparatus according to claim 1, wherein said disk drive apparatus comprises:

an information compression unit for compressing information; and

an information decompression unit for decompressing compressed information,

wherein

information compressed by said information compression unit is recorded on a disk loaded into said disk drive apparatus, and when compressed information is played back from the disk, a decompression process for decompressing information is performed by said information decompression unit.

17. (Original) A disk drive apparatus according to claim 16, wherein information compressed by said information compression unit contains moving-image information.

U.S. Application No. 09/632,200
Reply to Office Action dated December 15, 2005

PATENT
450100-02634

18. (Original) A disk drive apparatus according to claim 17, wherein the moving-image information is moving-image information compressed by the MPEG2 (Motion Picture Experts Group Phase 2) method.

19. (Original) A disk drive apparatus according to claim 1, wherein said disk drive apparatus has a camera for photographing an image, and the image information obtained by the camera is recorded on a disk loaded in said disk drive apparatus.

20. (Previously Presented) A video camera apparatus containing a disk drive apparatus according to claim 1.

21. (Canceled)

22. (Previously Presented) A data processing method for use with a disk drive apparatus having a plurality of operation modes, comprising:

a first mode having a first data rate and error processing for a first data reliability independent of a time duration for error processing;

a second mode having a second data rate and error processing for the first data reliability independent of the time duration for error processing;

a third mode having the first data rate and error processing for a second data reliability dependent on the time duration for error processing;

a fourth mode having the second data rate and error handling for the second data reliability dependent on the time duration for error processing,

U.S. Application No. 09/632,200
Reply to Office Action dated December 15, 2005

PATENT
450100-02634

wherein the first data rate is higher than the second data rate,
wherein the first data rate uses a higher power and a higher disk rotation speed
than the second data rate; and
wherein the first data reliability is higher than the second data reliability,
setting to the third and fourth operation mode on the basis of mode information
contained in a command received by said disk drive apparatus, to which an error handling
method appropriate for performing recording or playback of real-time continuous information is
made to correspond; and
measuring the duration of error handling for an error which occurs at the time of
recording or playback of data onto or from a disk, and when the error handling is not terminated
within an upper-limit time contained in said command, stopping the error handling and
performing a recording or playback process for data which follows.